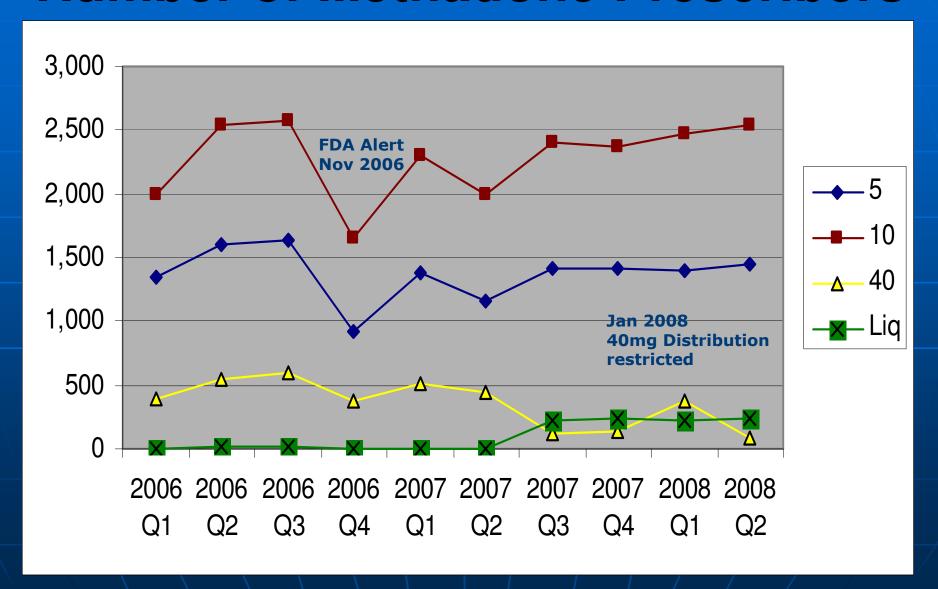
Methadone and Ohio's Experience

Danna E. Droz, RPh, JD

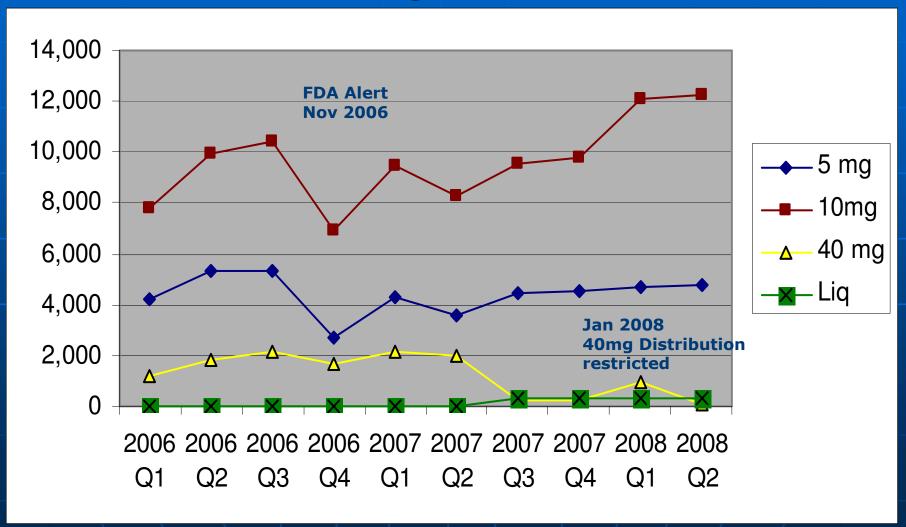
PMP Administrator, Ohio State Board of Pharmacy 614-466-4143; exec@ohiopmp.gov

Methadone "Alert" Conference November 13-14, 2008

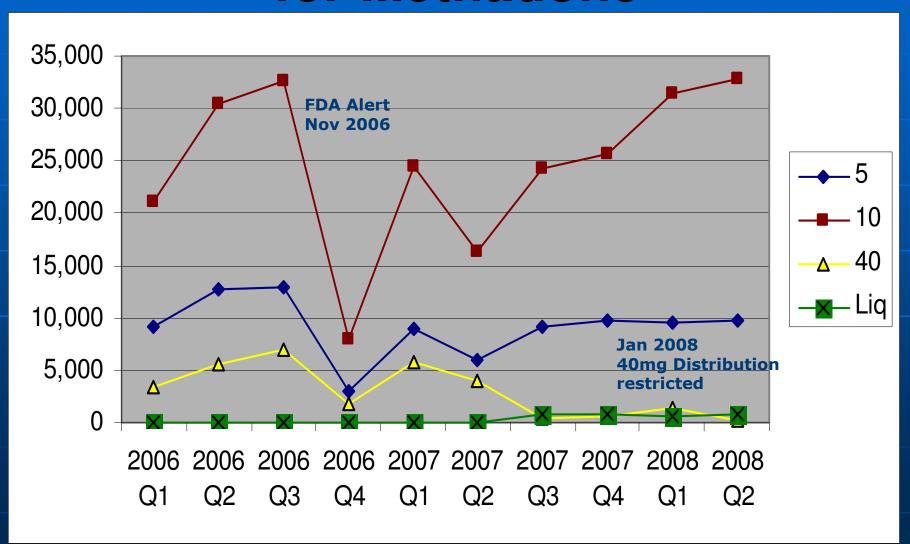
Number of Methadone Prescribers



Number of Patients Receiving Methadone

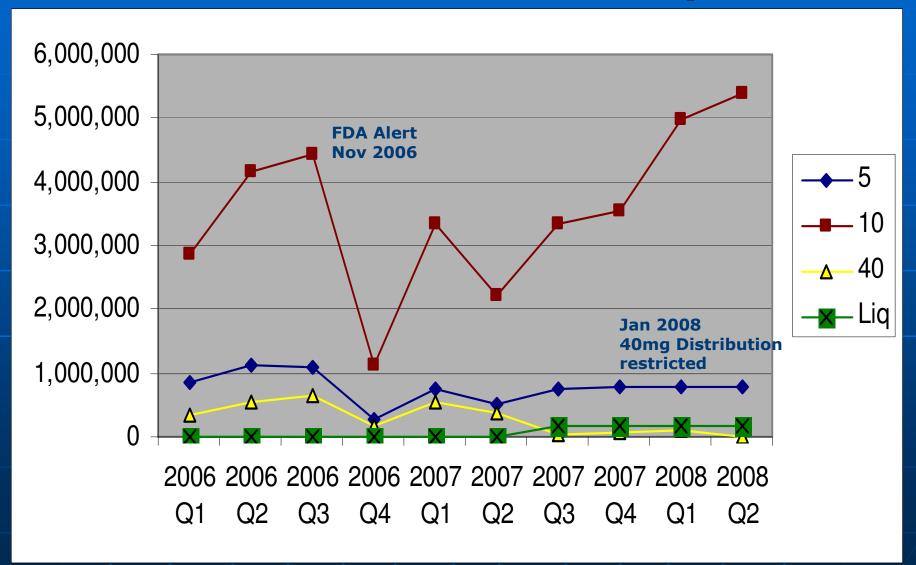


Number of Prescriptions for Methadone



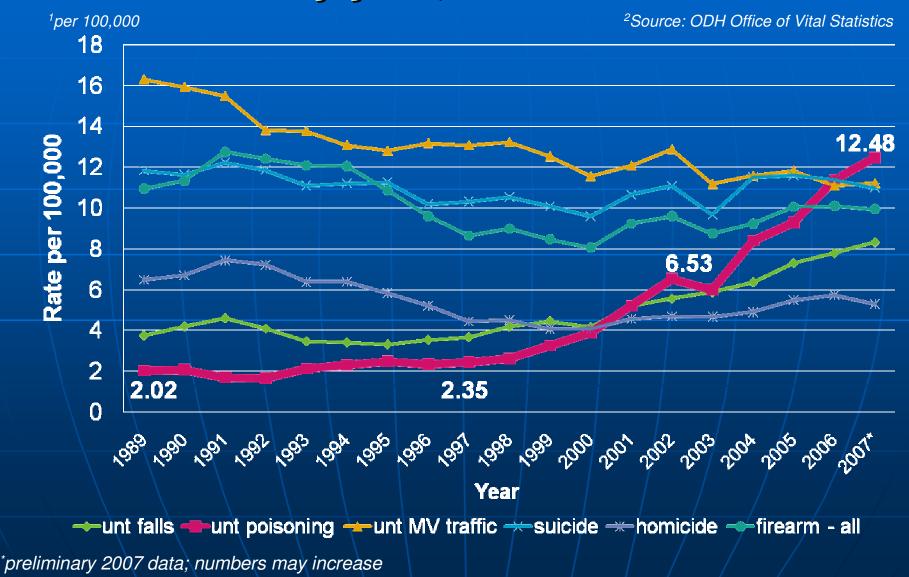
Source: Ohio Automated Rx Reporting System

Doses of Methadone Dispensed



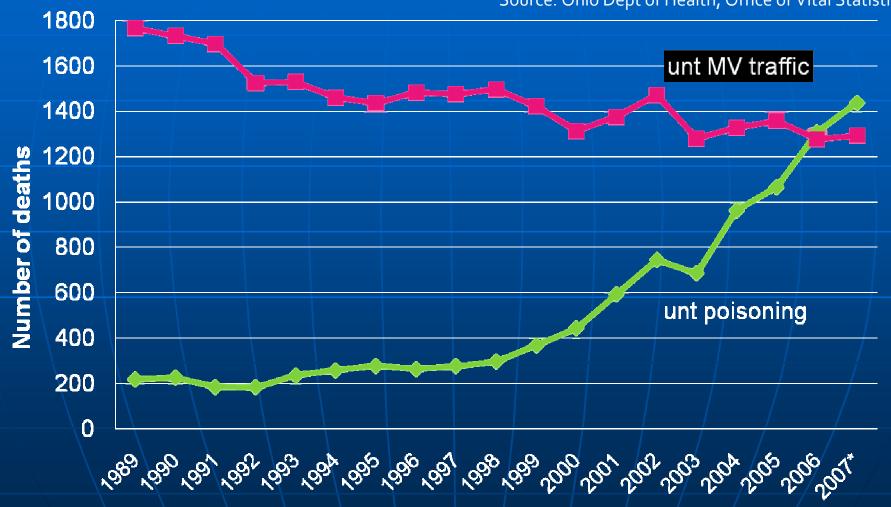
Source: Ohio Automated Rx Reporting System

Death rates¹ for leading causes of injury death by year, Ohio 1989-2007*²



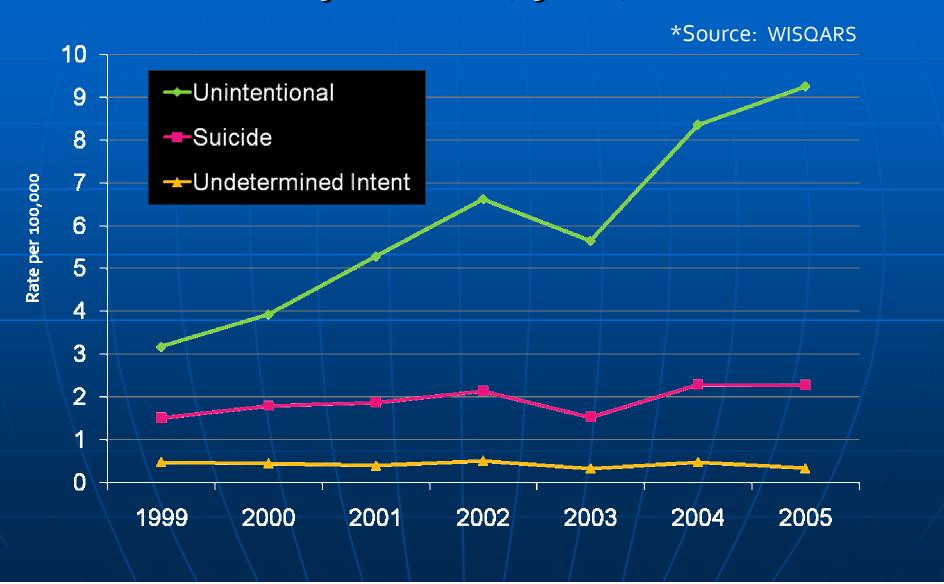
Number of leading causes of injury death by year, Ohio, 1999-2007^{1*}

¹Source: Ohio Dept of Health, Office of Vital Statistics



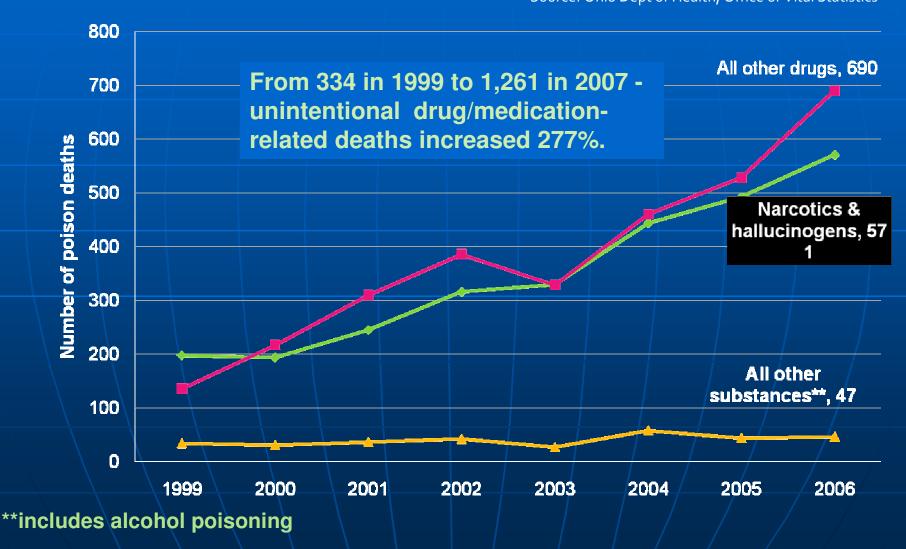
*preliminary 2007 data; numbers may increase

Poison death rates (per 100,000) of Ohio residents by manner, year, 1999-2005*



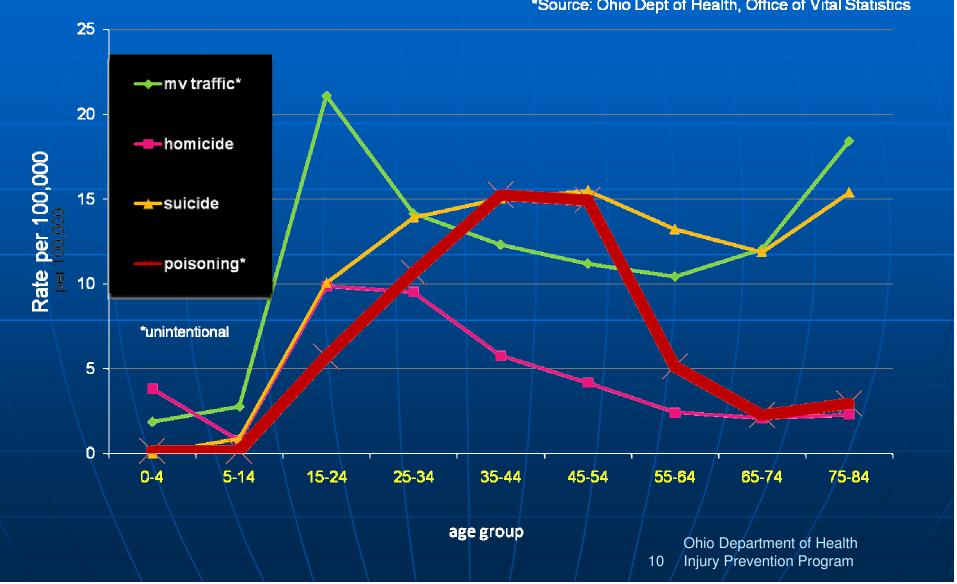
Number of Unintentional Poisoning Deaths by Substance, year, Ohio, 1999-2006

*Source: Ohio Dept of Health, Office of Vital Statistics

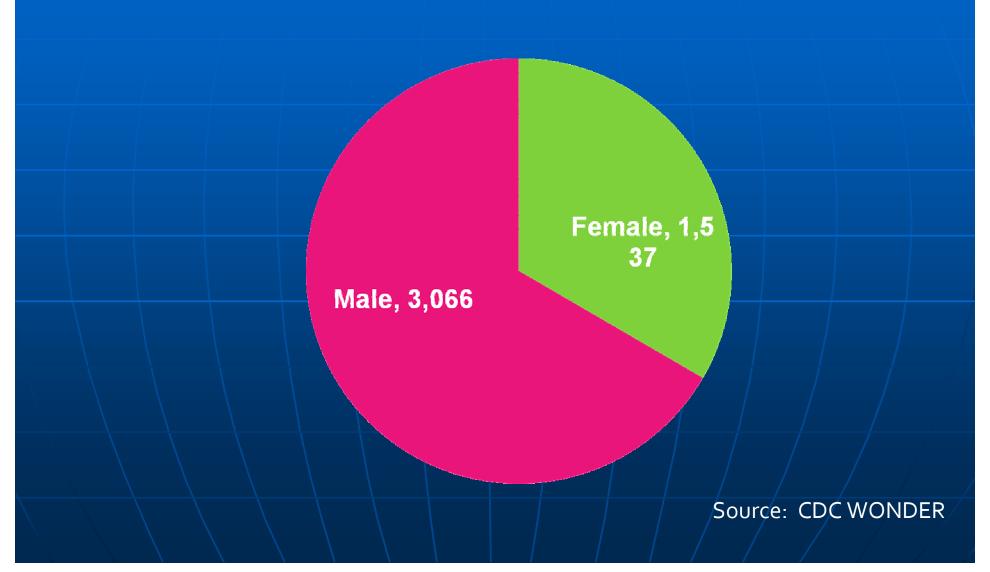


Average annual death rates (per 100,000), for leading causes of injury, by age group, ages 0-84, Ohio, 2002-05*

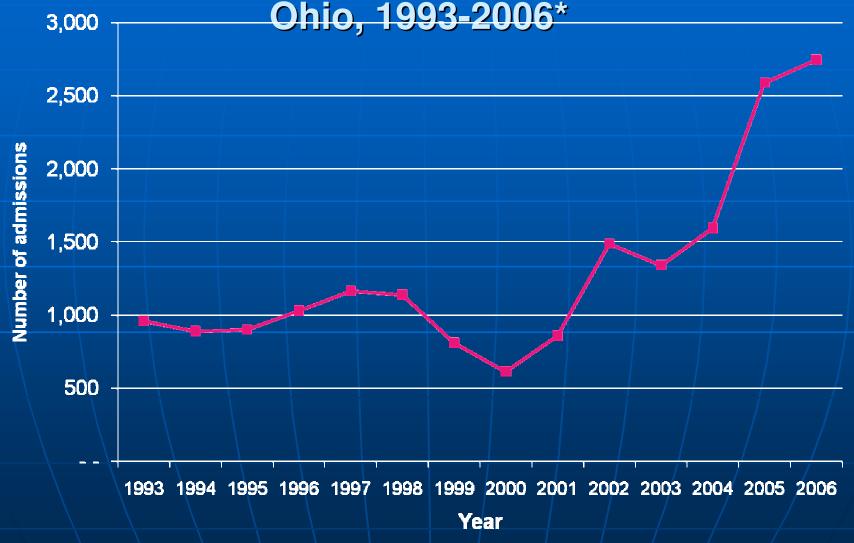
*Source: Ohio Dept of Health, Office of Vital Statistics



Unintentional drug/medication poisoning deaths by sex, Ohio, 1999-2005

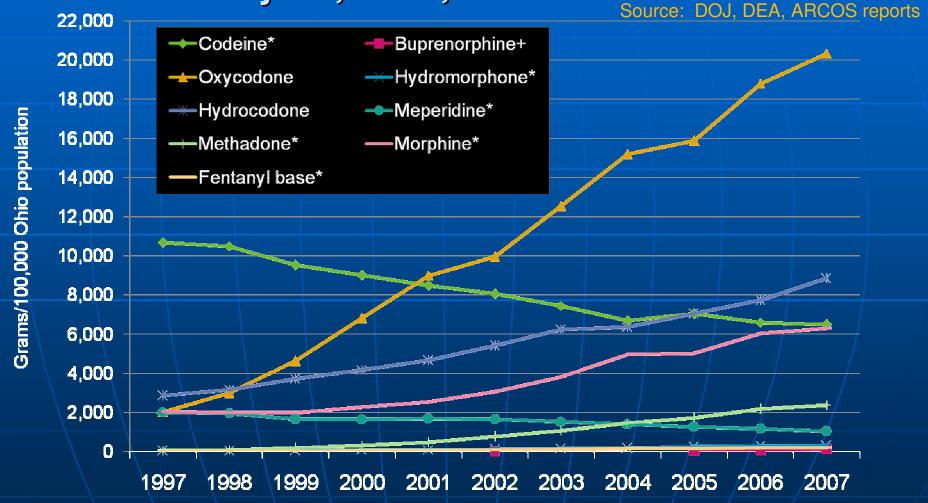


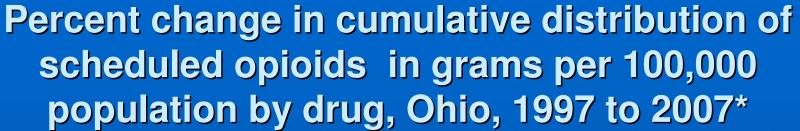


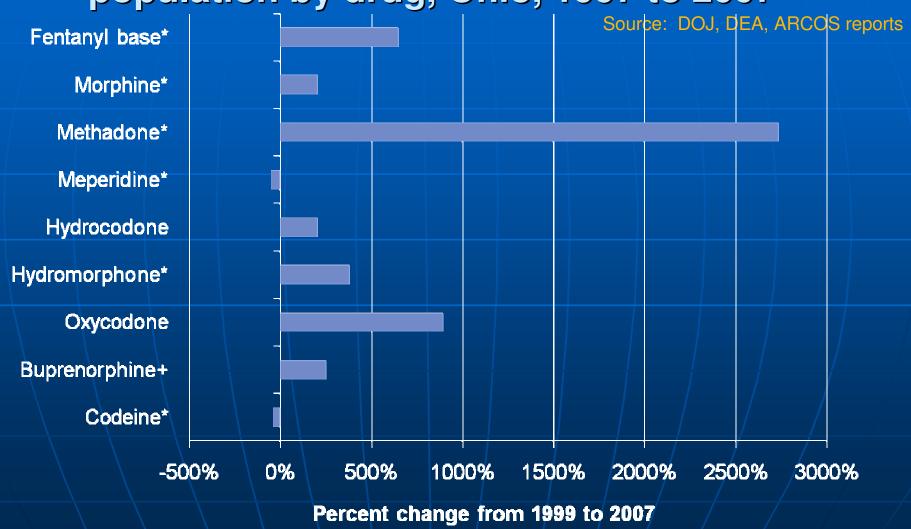


*SOURCE: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 10.3.06.

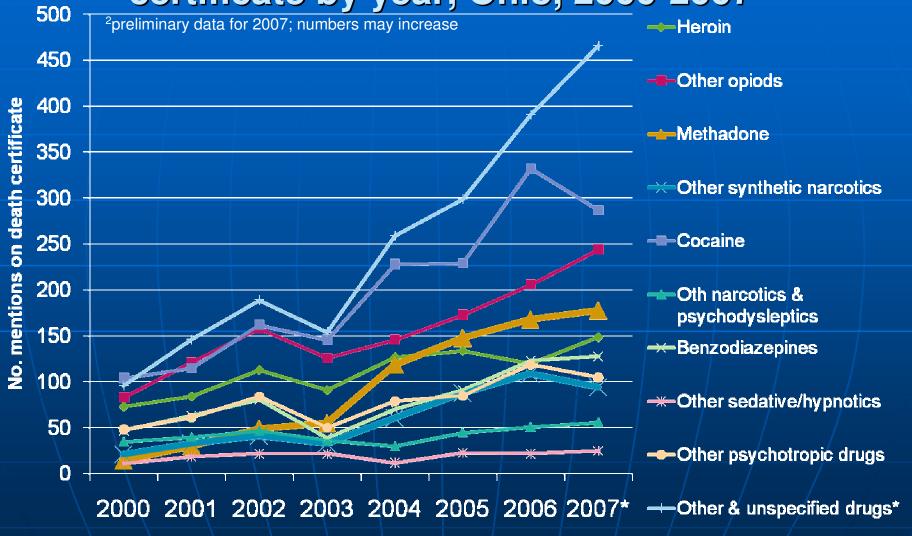
Cumulative distribution of scheduled opioids in grams per 100,000 population by drug, year, Ohio, 1997-2007*







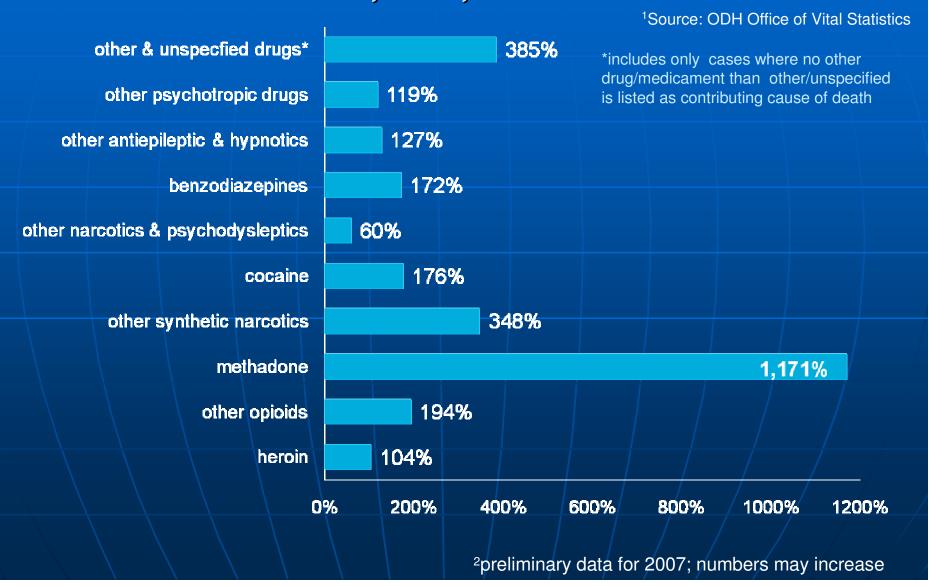
Number of unintentional poisoning deaths with specific drugs mentioned on death certificate by year, Ohio, 2000-2007*



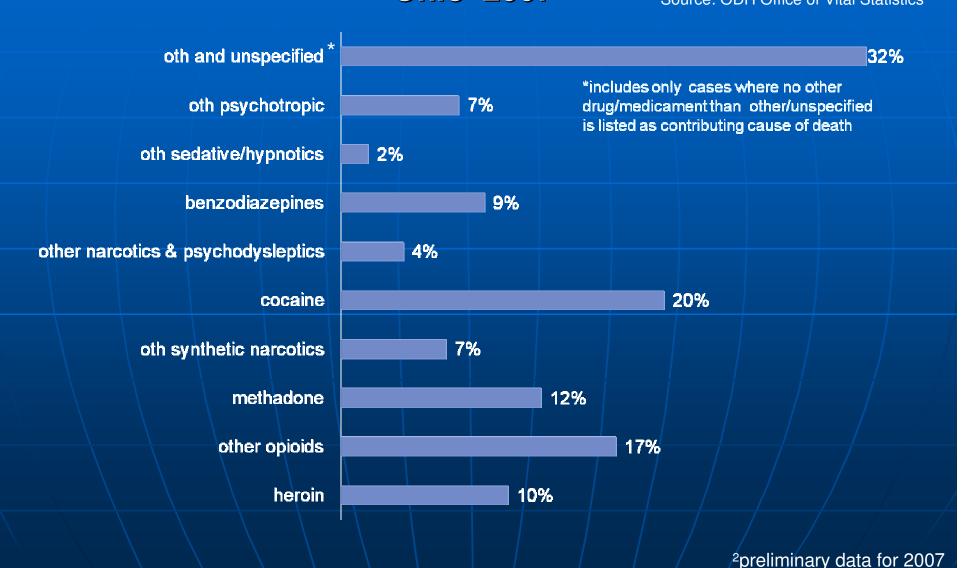
*includes only cases where no other drug/medicament than other/unspecified is listed as contributing cause of death

¹Source: ODH Office of Vital Statistics

Percent change in number of unintentional fatal drugrelated poisonings with specific drugs mentioned on death certificate, Ohio, from 2000 to 2007^{1,2}

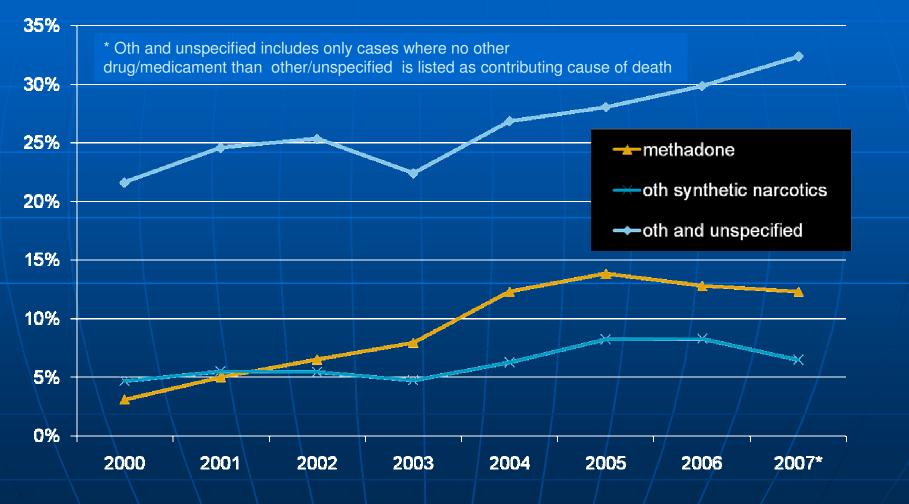


Proportion of all unintentional poisoning deaths in which drug is mentioned on death certificate, Ohio 2007*1 1 Source: ODH Office of Vital Statistics



Proportion of all unintentional poisoning deaths in which drug is mentioned on death certificate by year, Ohio 2000-07*1

¹Source: ODH Office of Vital Statistics



²preliminary data for 2007; numbers may increase

A Face on the Problem



- 14-yr old Caitlin Holdren of Logan, OH died in her sleep from a methadone OD
- Took 8-1/2 pills from a friend at a football game
- Friend obtained drug from grandfather's medicine cabinet
- Friend charged for providing narcotics

"A 14-year-old girl is not going to have the means to purchase drugs, but she does have the ability to get into her family's pill cabinet," Cummin said. "If you're going to lock up your gun to prevent someone from shooting themselves or children from shooting each other, you should lock your narcotics up."

Dr. David Cummin, MD, Hocking County Coroner

What we know so far...

- Overall -- #1 poisonings involve medications
- Increased access to opioid medications from late 90's on
- Increase in medication abuse by youth and adults – don't expect problem to subside anytime soon
- Ohio's rates are greater than US; particularly in Southern Ohio
- All age groups and races are affected by prescription drug use/abuse.

What we know so far...

- Males at higher risk for death; females hospitalized more.
- Black males aged 45-54 have the highest death rates of all.
- Most deaths are associated with opiods/narcotics.
- Most rapid increases associated with synthetic opiods (e.g., Methadone, Fentanyl)
- Multiple substance use (polypharmacy) is a factor in many of these deaths, complicating issue. Polypharmacy is a risk factor for fatal overdose.

Lessons Learned by Others

- Regulated prescription drugs taken mostly by mouth can produce a larger overdose epidemic than illicit drugs of uncertain strength taken intravenously, such as heroin.
- Just as a drug that is efficacious in clinical trials may not be effective in the community, drugs "safe" in terms of abuse in controlled settings may be abused in the community.

From: "Addressing the Problem", Drug Overdose Deaths: The Allegheny County and National Experience, May 2008

Epidemiology of opioid use versus opioid abuse

- Males are more likely to abuse and overdose with opioids; females are more likely to use.
- People in 20s and 40s are more likely to abuse opioids; people over 65 are more likely to use.
- Many people dying of prescription overdoses have a history of substance abuse.
- Overdoses are therefore more likely to represent abuse than overmedication.

From: "Addressing the Problem", Drug Overdose Deaths: The Allegheny County and National Experience, May 2008

Using PMP Data in Drug Diversion Investigations

- Large numbers do not equal diversion
- Sometimes PMP data supports anecdotal evidence
- Sometimes PMP data indicates potential investigations
- PMP data can increase the efficiency of a diversion investigation
- PMP data <u>cannot</u> document diversion

Large PMP numbers do not equal diversion

Doctor shopping?

Patient A

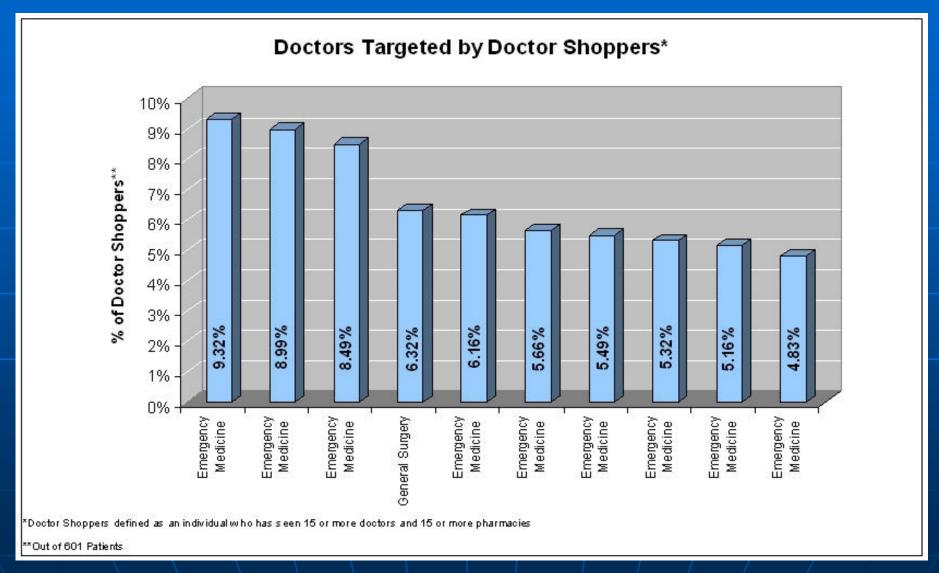
- 217 prescriptions in the past
 12 months
- Drugs include long acting opioids, short acting opioid, and benzodiazepine/sedative

Not doctor shopping

- BUT Patient A
 - Utilized 1 physician and 2 pharmacies
 - Each dispensing was only 7 day supply

Sometimes PMP data supports anecdotal evidence

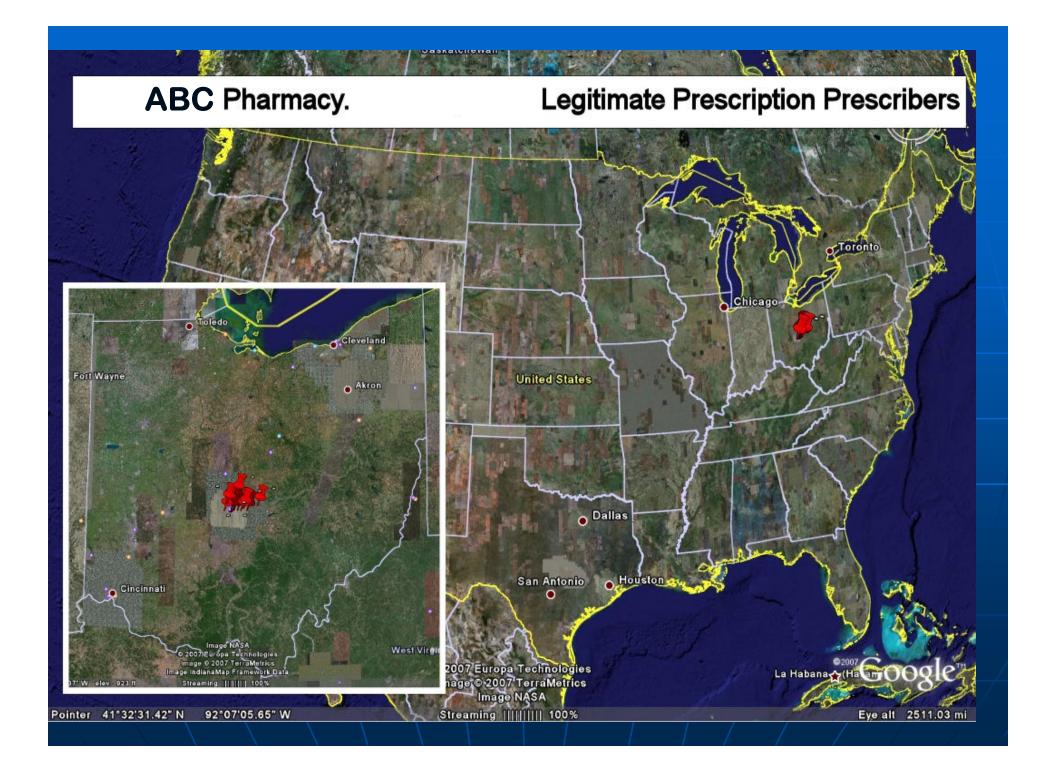
2006 PMP Data

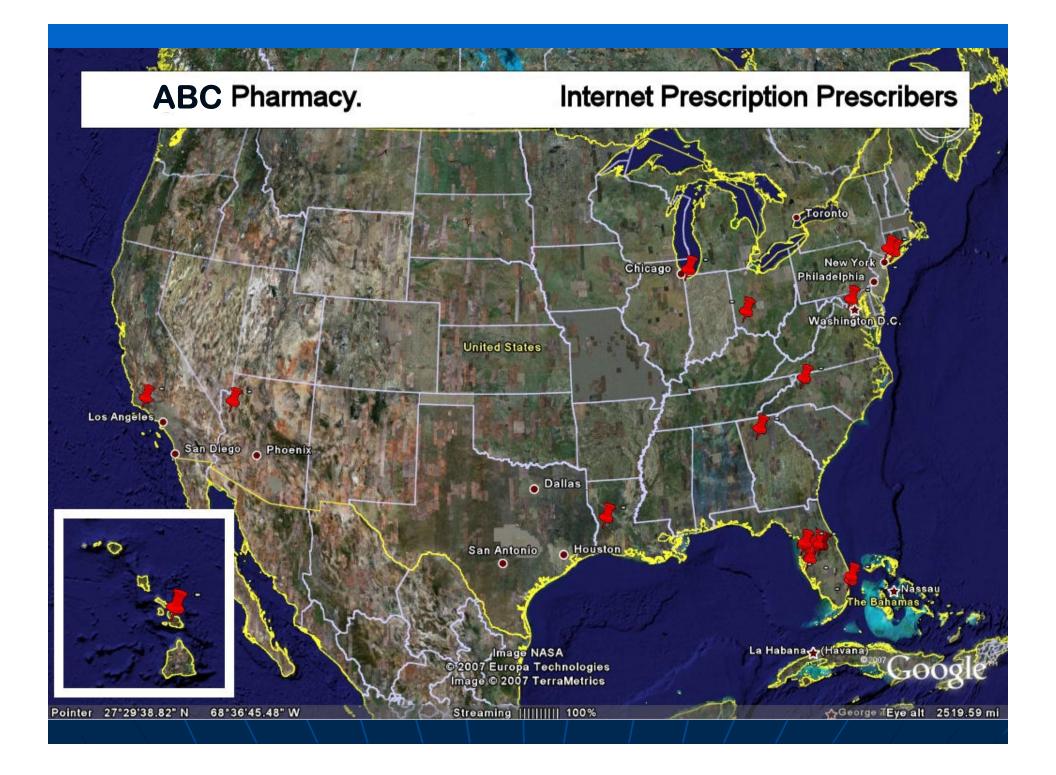


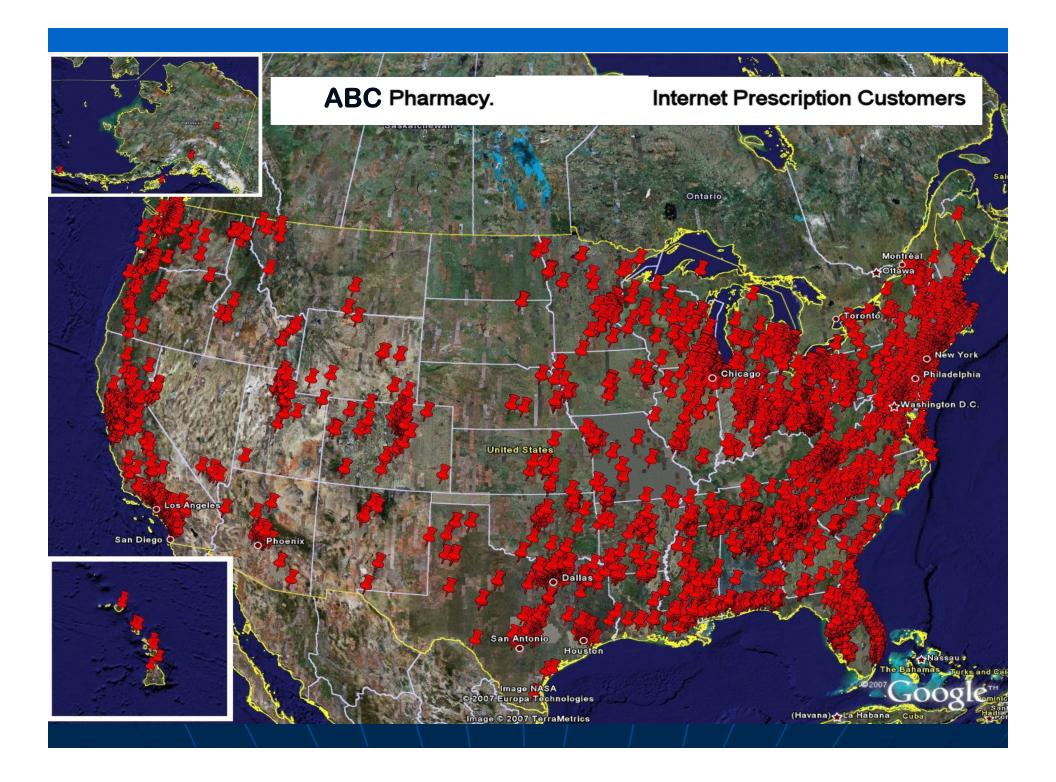
Data includes all of 2006, and all CS, carisoprodol, and tramadol Source: Ohio Automated Rx Reporting System

PMP data can supplement an investigation

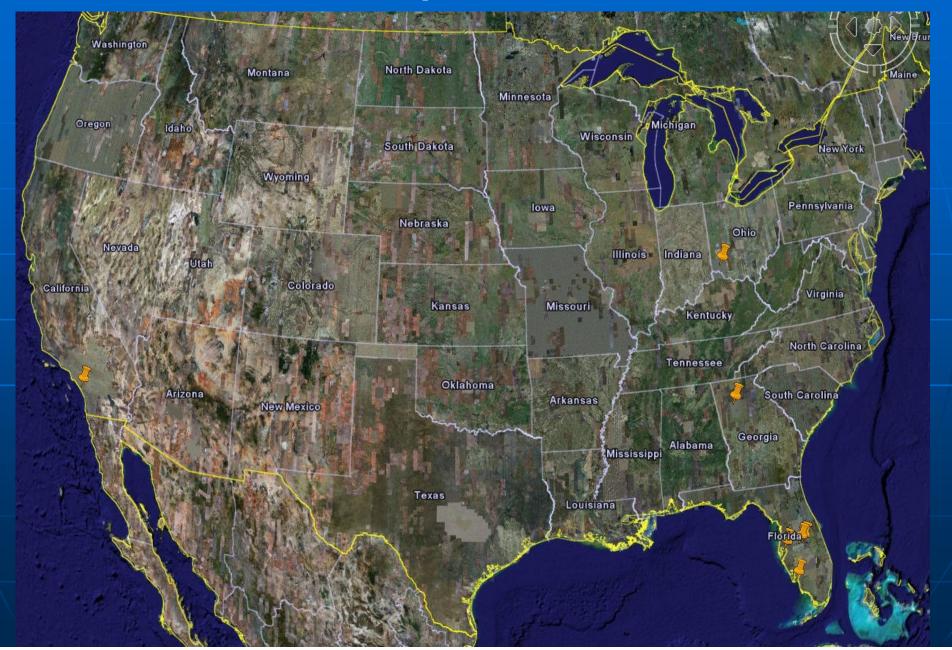




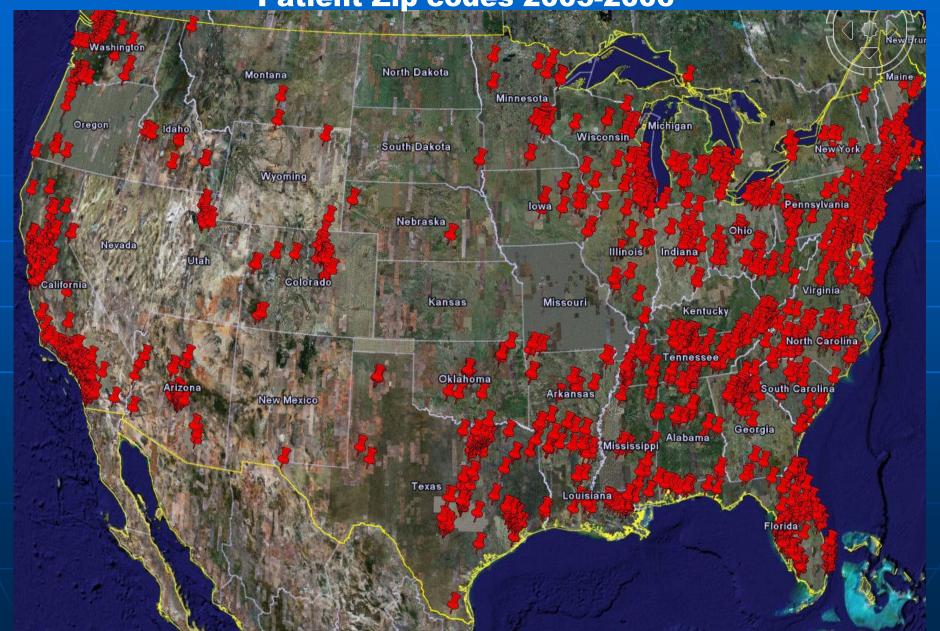




XYZ Pharmacy Prescriber Zip codes 2005-2006

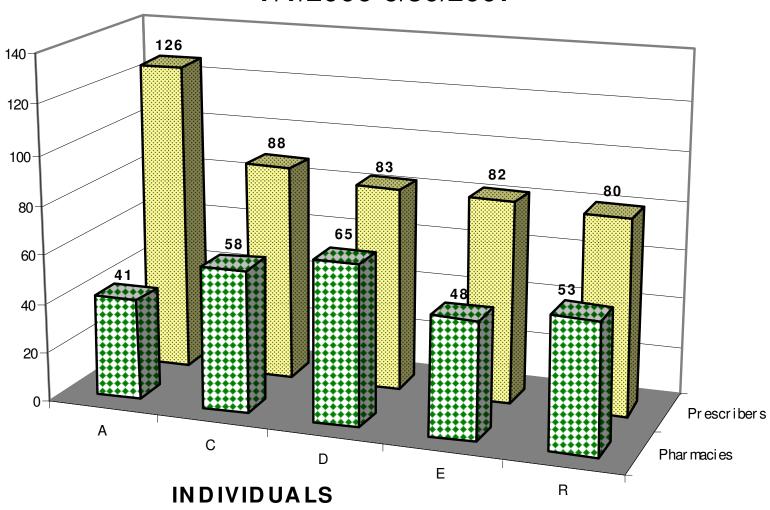


XYZ Leader Pharmacy
Patient Zip codes 2005-2006



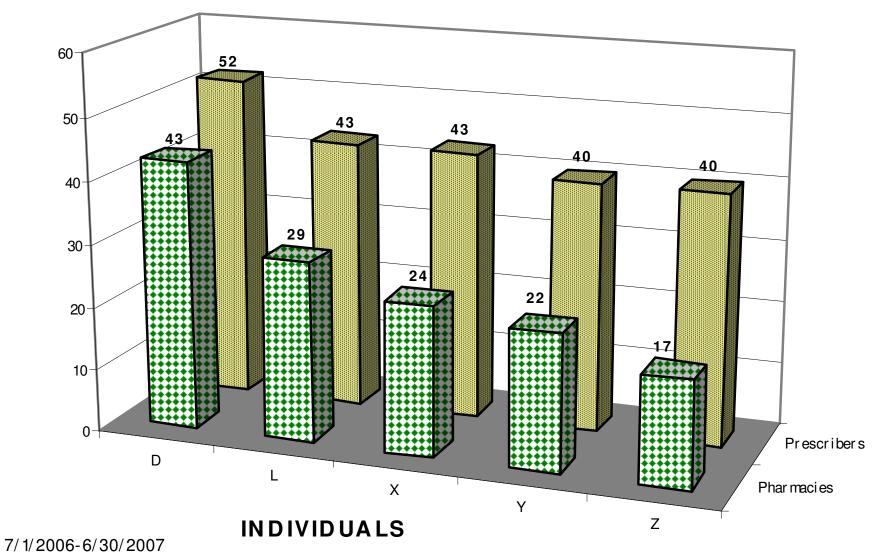
Sometimes PMP data indicates potential investigations

TOP PRESCRIBER/PHARMACY COMBINATIONS 7/1/2006-6/30/2007



Source: Ohio Automated Rx Reporting System

PRESCRIBERS-PHARMACIES FOR CII



Source: Ohio Automated Rx Reporting System

Take-home message

- PMP data can substantiate an allegation of diversion
- PMP data can increase the efficiency of a diversion investigation
- PMP data cannot document diversion – investigation is still necessary

QUESTIONS?